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FORWARD

Congratulations on your choice of a Sanyo MBC Series Micro Business Computer.

Your MBC is a compact, but powerful computer designed to satisfy the demanding requirements of todays "post-industrial" society.

The MBC series of microcomputers incorporate numerous high-level features to meet the exacting demands of the business and professional user.

These include a full 80 column non-glare screen and crisp character display to eliminate strain on the eyes over long periods of use. High-capacity, fast-access disk drives for efficient program/data storage. And an ergonomically designed keyboard for fast professional typing; detached for comfortable individual positioning.

Sanyo have also been among the first to recognize the importance of high-performance software to professional computer systems. The industry standard CP/M operating system is included; as is a powerful BASIC interpreter for high-level personal programming.

For professional applications, Sanyo has teamed up with the international expertise of MicroPro, to offer a full range of outstanding software. The widely-respected WordStar, together with SpellStar and MailMerge, meet the most demanding word processing requirements. CalcStar provides for sophisticated, yet simple to use, financial planning and business decision-making. And user needs for powerful, comprehensive data entry, retrieval and update are satisfied with InfoStar.

Sanyo hardware. MicroPro software. A professional combination.

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INTRODUCTION

WordStar®

WordStar is a high-performance word processing software package that gives your microcomputer the power of a dedicated word processing system, such that WordStar has more than four times the number of users as the most popular dedicated word processor. The power and performance that WordStar offers have made it the industry standard for word processing. And like all the programs in the MicroPro family, WordStar is easy to learn and easy to use.

WordStar word processing helps you communicate both better and faster. Anyone who has ever typed knows that editing and corrections have to be made which often require retyping of whole pages. WordStar eliminates the waste. It allows you to enter the text, rearrange paragraphs or blocks of text, edit, correct typos, insert information from other documents, reformat, proofread and paginate - so that what you print is an error-free, professional-looking document.

SpellStar®

Misspelled words and typos can ruin an otherwise perfect document. Whether you're sending a memo to your boss, a letter to your customers, or an article to a magazine, you want it to look perfect.

SpellStar, containing the 20,000 most commonly used words (based on the American Heritage Dictionary) in the English language, can help by proofreading everything you write before you print it.

It takes SpellStar just a few seconds to catch spelling errors and typos. When it reaches a word it doesn't recognize, SpellStar stops and gives you a choice. If it is a misspelled word, you can correct it and move on. Or, if the word is a client's name, a trademark, or specialized terminology, simply ask SpellStar to add the word to either its main dictionary or a supplemental one, and the word will not be flagged again.

MailMerge®

MailMerge is a versatile file merging program that lets you send personalized form letters that contain slightly different information or offers.

The personalized data can be inserted from a separate file, or you can insert data right from the terminal as you are printing. MailMerge will reformat the inserted item without disturbing the rest of your document.

What else can MailMerge do?

It can create legal documents from standard "boilerplate" paragraphs, assemble mailing labels and print invoices from DataStar files. When a mass mailing involves several steps, you can give MailMerge the instructions in advance, and MailMerge will complete the task while you get on with your business.

CalcStar™

CalcStar is a powerful electronic spreadsheet - a sophisticated yet easy to use calculating and business planning program, designed to work with other members of the MicroPro family of quality software.

CalcStar turns your screen into a "window" on a giant ledger sheet. It helps you make budget plans and sales forecasts with speed and accuracy, eliminating the need for pencils and calculators.

You can also ask your "What if" questions and let CalcStar give you rapid answers to produce cash flow analyses, resource allocation studies, new business plans, budget forecasts, and profitability analyses.

InfoStar™

The InfoStar system consists of:

DataStar, a powerful and comprehensive data entry, retrieval and update system and

ReportStar, a powerful report generator and file processor with FormSort, the fastest sorter available on microcomputers.

DataStar consists of two parts:

- FormGen: used to prepare forms for entering data.
- DataStar: handles the data entry and verification process according to the form requirements defined by FormGen.

ReportStar consists of four parts:

- Quick Report: prepares default reports on selected data fields in minutes.
- REDIT: prepares advanced reports with the full power of WordStar and contains a powerful file processor to define the updating, inputting or creation of multiple files.
- Report: extends the instructions of REDIT.
- FormSort: sorts files in the desired sequence with the full power and efficiency of SuperSort, the leading sorter for microcomputers.

SANYO - BASIC is able to read DataStar files for Specialized programming applications with the following program:

```
100 INPUT "FILENAME";N$
110 OPEN "I",#1,N$
120 IF EOF(1) THEN CLOSE:END
130 INPUT #1,A$
140 PRINT A$
150 GOTO 120
```

WORDSTAR REFERENCE

PROGRAM FUNCTION KEYS

PF1	= ^OL <ESC>	Set left margin to cursor position
PF2	= ^QF	Find
PF3	= ^QA	Find and replace
PF4	= ^KB	Mark block beginning
PF5	= ^KK	Mark block ending
PF6	= ^KV	Move block
PF7	= ^KC	Copy block
PF8	= ^OG	Paragraph tab
PF9	= ^OC	Center text
PF10	= ^OD	Print control display
PF11	= ^PS	Underscore beginning/ending
PF12	= ^PB	Boldface beginning/ending
PF13	= ^OR <ESC>	Set right margin to cursor position
PF14	= ^QR	Cursor to beginning of file
PF15	= ^QC	Cursor to end of file

CURSOR MOVEMENT KEYS

<	= ^S	Left one character
>	= ^D	Right one character
^	= ^E	Up one line
V	= ^X	Down one line
\	= ^QE ^QS	Top left corner of screen

NO-FILE MENU

D Used to create/edit a document, letter, file, etc.

E Used to rename a file.

F Turns the file directory display on and off.

H Allows the user to display and set the help level (3-0).

L Changes the logged disk drive from A: to B: to C:, etc.

M Used to run MailMerge.

N Used to create/edit a data file or a program.

O Used to make a duplicate copy of a file under a different name without changing the contents of the original.

P Used to print a file to printer or to disk.

R Used to run other programs under the WordStar NO-FILE MENU.

S Used to run SpellStar.

X Allows the user to exit from the WordStar NO-FILE MENU and return control to CP/M to turn your computer off or for use with other software.

Y Used to delete unnecessary files such as those with the ".BAK" extention or files you have no further need for.

MAIN MENU

Cursor Movement

^A Moves cursor to the left one full word.
^D Moves cursor to the right one character.
^E Moves cursor up one line.
^F Moves cursor to the right one full word.
^S Moves cursor to the left one character.
^X Moves cursor down one line.

Scrolling

^C Scrolls the screen up one screen at a time overlapping 5 or 6 lines to let you see where you were.
^R Scrolls the screen down one screen at a time overlapping 5 or 6 lines to let you see where you were.
^W Scrolls the screen down one line bringing a new line of text into view at the top of the screen.
^Z Scrolls the screen up one line bringing a new line of text into view at the bottom of the screen.

Delete

DEL Deletes the character immediately to the left of the cursor.
^G Deletes the character directly over the cursor.
^T Deletes all characters from the cursor position to the first space encountered to the right of the cursor.
^Y Deletes the complete line the cursor is in regardless of the position of the cursor.

Miscellaneous

^B Reforms mis-alligned text due to editing of previously justified paragraphs. Reforms to the next encountered RETURN (e.g. only one paragraph).
^I Moves cursor to next tab. If no tabs are set, moves cursor to column 1 of the next line inserting a return.
^L Finds/Finds & Replaces the last word/phrase you specified using either ^QF or ^QA.
^N Inserts a return flag "<" in the right-most column of the screen and inserts a blank line at the cursor position keeping the cursor in that same position regardless of whether INSERT ON is displayed or not.

^U Cancels a command. Depending upon which command is canceled, you may be asked to press the <ESC> key to return to the WordStar MAIN MENU.

^V Turns the "INSERT ON" message in the STATUS LINE on and off.

RETURN Inserts a return flag "<" in the right-most column of the screen. If INSERT ON is displayed, will insert a blank line moving the cursor to the next line; otherwise, it will only insert the flag and move the cursor to the next line.

Other Menus

^J Calls the HELP MENU into display to let you ask for an explanation of the given selections.

^K Calls the BLOCK MENU into display to let you save your file; set temporary place markers; perform block operations such as copy, move, delete, or write block of text; perform file operations such as reading, deleting, renaming, printing, or copying other files while in another file; and disk operations such as changing the logged disk drive, or displaying the disk directory at the top of the file you are currently working on, etc.

^O Calls the ONSCREEN MENU into display to let you set your margins and tabs; temporary paragraph indentation; center text; change the line spacing; and to set several toggles such as justification, hyphen help, print displays, etc. ON or OFF.

^P Calls the PRINT MENU into display to choose a variety of advanced print functions such as boldface, double-strike, underlining, subscripts, superscripts, strikeouts; printing two or more characters or lines on top of each other for special effects; printing special spaces that will not break certain words when word-wrapped; and for printing two special characters not found on most keyboards but that are available on most daisy wheels. (e.g. ¢ and ¬).

^Q Calls the QUICK MENU into display for more cursor movement commands; more delete commands; and find/find & replace commands.

HELP MENU

^B Gives an explanation about paragraph reform, how to use it; also explains about hyphenation help, and how to turn it on and off.

^D Gives an explanation about print control commands and dot commands along with tips on using them.

^F Gives an explanation about the flags in the right-most column. (e.g. "<", ".", ":", " ", "-", "+", "P", "M", and "?".)

^H Displays and sets the Help Level (3-0). The most helpful being 3, and 0 giving you no help whatsoever, with 2 and 1 giving less and less help.

^M Gives an explanation about setting margins, tabs, line spacing; turning justification on and off; turning insert on and off; tips on entering a columnar table; and how to outline and format text.

^P Gives an explanation about setting and returning to previously set place markers, etc.

^R Gives an explanation about the RULER LINE and its use.

^S Gives an explanation about the STATUS LINE, and the information contained within it.

^V Gives an explanation about copying, moving, writing, and deleting blocks of text.

QUICK MENU

Cursor Movement

^QB Moves the cursor to the block beginning marker "<B>" if it has been set; otherwise an error message will appear.

^QC Moves the cursor to the very end of a file regardless of where the cursor is positioned.

^QD Moves the cursor to the right-most character of the current line. If the current line is wider than 80 columns, ^QD will horizontally scroll you 20 or so columns at a time until the end of that line is reached.

^QE Moves the cursor to the top most line visible on the current screen.

^QK Moves the cursor to the block end marker "<K>" if it has been set; otherwise an error message will appear.

^QP Moves the cursor to the position it was at before the previous command was activated. (e.g. After you save a file using ^KS your cursor returns to the beginning of your file. If you press ^QP immediately after the file has been saved, your cursor will return to the exact same position it was at before you pressed ^KS.

^QR Moves the cursor to the very beginning of a file regardless of where the cursor is positioned. If a file is large, and you wish to move from near the end of the file all the way to the beginning, pressing ^KS is much quicker and takes up less working disk space.

^QS Moves the cursor to column 1 of the current line.

^QV Moves the cursor to the last string of characters in which you either asked the computer to find/find & replace, or in which you marked a block of text using ^KB and ^KK.

^QW Continuously scrolls the screen down one line at a time. The speed of the scrolling can be varied by typing a number from 1 to 9, 1 being the fastest speed, and 9 the slowest. To stop scrolling, press the space bar.

^QX Moves the cursor to the next-to-bottom-most line visible on the current screen as the bottom line is actually a preview line of the next screenful and will not allow the cursor to be moved into it without first scrolling up one line.

^QZ Continuously scrolls the screen up one line at a time. The speed of the scrolling can be varied by typing a number from 1 to 9, 1 being the fastest speed, and 9 the slowest. To stop scrolling, press the space bar.

^Q0 | ^Q9 Moves cursor to the specified place marker <0> through <9> which ^Q1 was set by the ^K0 - ^K9 command. If a place marker has not been set using the ^K command an error message will appear.

Delete

^QY Deletes all characters from the cursor position to the rightmost character in the same line as the cursor is in.

^QDEL Deletes all characters from column 1 of the line the cursor is in to the character just to the left of the cursor position.

Miscellaneous

^QA Finds a string of text in a file and replaces it with another string. Options are the same as for ^QF with two extras: find and replace globally (from beginning to end), and replace with or without asking at each occurance.

^QF Finds a string of text in a file. Allows the user the option of finding a string a certain number of times, searching backwards through the file, looking for prefixed words or whole words only, and ignoring upper/lower case letters.

^QL Finds words that were marked with SpellStar. If this command is executed before using SpellStar, it will not find any flagged words as SpellStar has not set/marked any.

^QQ Repeat command. Repeats the next character or command input from the keyboard. (e.g. If ^QQ@ were pressed, a line of @@@'s would automatically be repeated across your screen. ^QQ^F would repeatedly move the cursor forward one word at a time.) The speed can be changed by pressing a number between 1 and 9; 1 being the fastest, 9 the slowest. To stop the repetitive command/character, press the space bar.

ONSCREEN MENU

Margins & Tabs

^OF Allows user to set both margins to match the length of the text the cursor is currently in.

^OG Temporarily indents your left margin to the next tab stop until a user entered return is encountered. Then the left margin is reset to its original column. Pressing ^OG more than once will indent your left margin that number of times.

^OI Sets a regular tab stop by typing the column number in which to place that tab, or sets a decimal tab by preceeding that tab column number with the symbol "#". Pressing <ESC> without typing a number will set a tab at the cursors' location before ^OI was pressed. Typing a "#" and pressing <ESC> will set a decimal tab at the cursor column.

^OL Sets left margin to user specified width between 1 and 240.

^ON Clears either one tab stop at a time by typing the column number of the tab you wish to clear, or clears all tab stops by typing "A" or "a". With the cursor positioned in the same column as the tab you wish to clear, only <ESC> need be pressed to clear that tab.

^OR Sets right margin to user specified width between 1 and 240.
^OX Temporarily releases margins to allow user to move cursor outside the regular margins. This command is automatically cancelled once the cursor is moved back within the standard margin or upon executing another ^OX.

Line Functions

^OC Centers text in the line the cursor is currently in, between the left and right margins, after the text has been entered. The cursor can be placed anywhere within the line to center the text.
^OS Allows automatic setting of line spacing from 1 to 9 lines. Works for word wrap, for reformatting (^B), etc. If line spacing is set to other than single space, the status line will display the line spacing that is currently set just to the right of the INSERT ON display.

Toggles

^OD Toggle to turn print control characters (from the ^P menu) and soft hyphens that will not print ON or OFF. Defaulted to (ON). Used when checking for final layout on the screen before printing without having to overlook all of the print control characters embedded in your text.
^OE Toggle to turn soft hyphen entry ON or OFF. Defaulted to (OFF). Soft hyphens are hyphens that will only print if they fall at the right margin during paragraph reform. The hyphen help routine uses soft hyphens.
^OH Toggle to turn hyphen help routine ON or OFF. Defaulted to (ON). Will automatically carry the word that won't fit on the current line to the next line without stopping for hyphenation when set to OFF.
^OJ Toggle to turn justification ON or OFF. Defaulted to (ON). Used to change from justified text to ragged right text.
^OP Toggle to turn page break displays ON or OFF. Defaulted to (ON). Note: This command will change the display of your status line from "PAGE ? LINE ?? COL ??" to "FC=????? FL=?????". FC (File Characters) displays the numbers of bytes your cursor is currently positioned at from the beginning of your file. FL (File Lines) displays the total number of file lines from the beginning of your document to the current cursor line. Both of these commands include the counting of dot commands, print control characters, returns, etc, along with all the standard ASCII characters.

^OT Toggle to turn the ruler line ON or OFF. Defaulted to (ON). When turned off, allows one extra line per screenful to be displayed.
^OV Toggle to turn variable tabs ON or OFF. Defaulted to (ON).
^OW Toggle to turn word wrap ON or OFF. Defaulted to (ON).

BLOCK MENU

Saving Files

^KD Allows you to save the current file to disk and then returns you to the NO-FILE menu from which you may select another function such as printing the file you just saved, editing another file, etc. (See NO-FILE menu).
^KQ Abandons all changes that have been made since the last time the file was saved with either ^KS, ^KD, or ^KX.
^KS Allows you to save the current file to disk and continue editing/reviewing the file. Using ^QP after saving in this method will return your cursor to the exact position it was at before ^KS was pressed. If another character has been pressed between ^KS and ^QP, the ^QP function is cancelled.
^KX Allows you to save the current file to disk and then exits WordStar just as if you had originally pressed ^KD and then ^X from the NO-FILE menu.

Place Markers

^K0 | ^K9 Sets up to 10 temporary place markers <0> to <9> anywhere in your text to be returned to quickly by using ^Q0-9. Markers appear in the text as <1>, <2>, etc. To hide the markers, position the cursor at the same position as the marker and press ^K and that number again. Note: Once you have exited from your file, all place markers will disappear, and will have to be reset if you wish to use them again.

Block Operations

^KB Marks the beginning of a block of text to be moved, copied, deleted, or written to another file. Displays as a <B> on your screen.

^KC Copies all text between the block beginning marker <B> and the block end marker <K> to the cursor position. After a block of text is marked, and the markers are displayed, move your cursor to the location you want the information copied, and press ^KC. Any text that was to the right or below the cursor position will be moved below the newly copied block of text. If the markers are not set, or the markers are hidden, or the end marker is before the beginning marker or if one marker is missing, an error message will result.

^KH Hides the <B> and <K> block markers. Once they are hidden, they may be displayed again by pressing ^KH once more. If a command is given to move, copy, delete, or write a block of text while the markers are hidden, an error message will result.

^KK Marks the end of a block of text to be moved, copied, deleted, or written to another file. Displays as a <K> on your screen.

^KN Changes from block mode to column mode. A block of text contains all text between the <B> and <K> markers. A column of text contains all text starting at the same column as the <B> (marking the top left corner) and ending with all text up to the same column as the <K> (marking the bottom right corner) not including the text that falls before the <B> column or after the <K> column.

^KV Same as the ^KC command above, except that it moves the block of text to the cursor position instead of copying it. The same errors will also occur if the block markers are incorrectly set.

^KW Same as the ^KC command above, except that it writes all text to another file specified by the user when the prompt

NAME OF FILE TO WRITE MARK TEXT ON?

appears at the top of the screen. If you specify a file that already exists, a warning message will also be displayed telling you that a file by that name already exists, and asks you OVERWRITE (Y/N)?. Pressing "Y" will cause the previous contents of that file to be destroyed and replaced with the contents of the new block of text you are writing. Pressing "N" will not overwrite that file, but again ask you for the name of the file to write the marked text on giving you the option of typing in a different name.

^KY Same as the ^KC command above, except that it deletes all text between <B> and <K> and closes up the gap after the text has been deleted.

File Operations

^KE Allows the user to rename any file except the one you are working on to another name. If you specify the file you are working on, an error message will appear, and the prompt asking to to specify another name will appear again.

^KJ Allows the user to delete files while editing a different file. This is useful if you are saving text and find out that you have no disk space left to completely save the file you are currently working on. If this should happen, you may temporarily delete one or both of the WordStar overlay files to give you enough room on your disk to complete the save process. After a successful save, you will have to recopy the two overlay files back onto your disk before you can use WordStar again. It is recommended that you transfer one or more of the files that were on that disk to another disk prior to recopying the overlays.

^KO Allows the user to copy one file to another while editing a third file. If you are copying from the same file you are editing, only that portion of text which has been stored on disk will be copied, and not the portion in which you are currently keying in and not yet saved.

^KP Allows the user to print a file while editing another file. Offers the same printing prompts as if you were printing from the NO-FILE menu. **WARNING:** If you decide to print the same file you are editing while you are editing, the printer will only print that portion of text you have already saved to disk. In other words, if you have made some changes to your file, but not yet saved that file, those changes will not be print. Also, you cannot save that same file that is printing until after the printing command has finished, or until you cancel the printing command by pressing ^KP and then typing "Y" to abort printing.

^KR Reads a file other than the one you are working on into the cursor position pushing all text to the right and below the cursor down below the end of the file being read in. The file being read may contain anywhere from one character to the maximum capacity of your disk. Hint: If you wanted to copy a large paragraph/page of text from the beginning of a large file to a place near the end of that file, it may be quicker to write that paragraph/page to a temporary file, move your cursor to the place you want to copy it to and then read it in from the temporary file you created.

Disk Operations

^KF Allows the user to view the disk directory of the currently logged disk drive at the top of the screen. This is a toggle command. Press ^KF once and the directory appears, ^KF again, and it disappears.

^KL Allows the user to change logged disk drives just as if ^L had been keyed in under the NO-FILE menu.

PRINT MENU

Special Effects
(begin and end)

^PB Tells the printer where to start and stop boldfacing text. Must be told where to start and stop, otherwise boldfacing will continue through to the end of the document.

^PD Tells the printer where to start and stop doublestriking text. Must be told where to start and stop.

^PS Tells the printer where to start and stop underlining text. Must be told where to start and stop.

^PT Tells the printer where to start and stop superscripting text. The height of the superscripts may be changed using the dot command ".SRn". Must be told where to start and stop.

^PV Tells the printer where to start and stop subscripting text. The height of the subscripts may be changed using the dot command ".SRn". Must be told where to start and stop.

^PX Tells the printer where to start and stop striking-out text. Must be told where to start and stop.

Special Effects
(one time each)

^PF Allows the user to print one of two characters provided on 96 character daisy wheels with only a 94 character keyboard. On a standard COURIER 10 daisy wheel, ^PF will print the "cent (¢)" symbol not appearing on most keyboards. Depending on the daisy you are using, this symbol may vary.

^PG Allows the user to print the other of the two characters provided on 96 character daisy wheels with only a 94 character keyboard. On a standard COURIER 10 daisy wheel, ^PG will print the "logical not (¬)" symbol not appearing on most keyboards. Depending on the daisy you are using, this symbol may vary.

^PH Placing this character between any two characters will cause the latter character to overprint the former. (e.g. Y plus = yields ¥, c plus | yields ¢). May be done with three or more characters also by continuing to key in^PH after each character you want to have struck over with another character.

^PO Special non-break space. Used between product names, etc. instead of a normal space in case later reforming would normally cause the "IX" in the name "CENTROID IX" to be carried to a new line. Using ^PO instead of a "space" will not let WordStar break that product name.

^PRETURN Inserts an overprint line flag "-" in the right-most column of your screen and positioning your cursor in the line below the line you pressed ^PRET(URN). Causes the line following the line in which the command was type to overprint the previous line. Used for special effects.

Printing Changes

^PA Changes the printing pitch from standard pitch to alternate pitch. Used mainly when changing pitch in the middle of a line. The alternate pitch may be defined by the user following the instructions in Section 7 of the WordStar Reference Manual.

^PC Causes the printer to stop printing where this command is placed. Used mainly for changing daisy wheel fonts, or possibly the type of ribbon you are using. To resume printing after the printer has stopped, press ^P from the NO-FILE menu.

^PN Changes the printing pitch from alternate pitch back to standard pitch. used mainly when changing pitch in the middle of a line. The standard pitch may be defined by the user following the instructions in Section 7 of the WordStar Reference Manual.

^PY Causes the ribbon color on printers capable of handling dual color ribbons to change from one color to another. The color specified will continue until another ^PY appears in the text to change back to the original color.

User Patches

^PQ(1) Currently not used.
^PW(2) Currently not used.
^PE(3) Currently not used.
^PR(4) Currently not used.

SUMMARY OF DOT COMMANDS

.BP0 Turns bidirectional printing off.

.BP1 Turns bidirectional printing back on. (**defaulted to on**) This command is not normally used. The only time you should specify this command is if you are using a printer that does not have bidirectional printing capabilities.

.CWn Changes the character width in n/120ths of an inch (e.g., 10/120ths of an inch = 1/12th of an inch per character, or 12 pitch; 12/120ths of an inch = 1/10th of an inch per character, or 10 pitch; etc.). (**default = 10 pitch**)

.FO This is the footer margin, if you want your company's name, or the title of the document printed at the bottom of each page, then you would use the .FO command. Another use is if you like to have your page numbers printed with hyphens before and after the number "- 2 -", you could specify the .FO command and then type "- # -" at the column where you want your page number to be printed. Some people like to have the footer read "Page n of 15 pages". To do this, use the .FO command and then type "Page # of 15 pages" in the footer line at the column you want that footer to be printed. (**default = page number**)

.HE This is the header margin, it works just like the footer margin except that instead of printing at the bottom of every page, the header is printed at the top of every page. (**default = blank**)

.HMn This is the heading margin. It is used to specify the amount of space between the heading and the first line of text. (**default = 2 lines**)

.IG
or
.. Either of these dot commands may be used to make notes to yourself on the screen, and not have them printed. (e.g., if you think a sentence sounds funny, and you don't have time to read over it now, then you could type something like ".IG This sentence sounds funny."

.LHn This is the line height command. You can change the line height in increments of n/48ths of an inch. (e.g., single space is 8/48ths of an inch, or 1/6th of an inch per line; double space is 16/48ths of an inch, or 1/3rd of an inch per line; 1.5 lines per inch would be 12/48ths of an inch, or 1/4th of an inch per line) other line heights between single and 1.5 can also be specified. (**default = 8**)

.MBn This is the margin at bottom command. It specifies how many lines are to be between the last line of the text area and bottom of each page. This does not include the page number or footer. **(default = 8 lines)**

.MTn This is the margin at top command. It specifies how many lines are to be between the top of the page and the first line of text. This does not include the header. **(default = 3 lines)**

.OP This command omits the printing of page numbers at the bottom of each page. If you place .OP at the beginning of your document, no pages thereafter will contain a page number unless you specify the .PN command explained below.

.PA This is the page break command. You may use this command to start a new page. It will automatically form feed the paper to the beginning of the next page regardless of how many lines that page has.

.PCn This is the page column command. It is used to specify what column you would like your page number printed at. (e.g., your right margin is set to 70, and you want your page number centered on the page. Then you would type .PC35, half of 70 to tell the computer that you want all of your page numbers printed in column 35. **(default = column 33)**

.PLn This is the paper length command. It specifies how many lines will fit per page of paper. (e.g., if you wanted to use A4 paper turned sideways, you could not get as many lines per page as you could if it were inserted upright, therefore, you would need to use the .PL command to specify exactly how many lines per page can be printed, again taking into consideration the .MT, .MB, and .LH to figure how many printed lines per page you want. **(default = 66 lines)**

.PNn This is the page number command. It is used to turn the page numbers back on after they have been omitted using the .OP command, and also for specifying what page number you want printed at the bottom of that page. (e.g., we want to print a five page document starting with page number 1722, then we would put .PN1722 at the top of that page, and every page thereafter would automatically be incremented one). **(default = 1 for first page, incrementing by 1 every page thereafter)**

.POn Offsets the left margin from the left edge of the paper depending on where you insert your paper. **(default = 8 spaces)**

.SRn This is the subscript roll command. It is used to get special printing effects on your printer. (e.g., if you want to make the Japanese post office yubinbango symbol {i.e., 〒} you would need to use this command). It adjusts how far up/down the super/subscripts are to be rolled in n/48ths of an inch. **(default = 3)**

.UJ0 Turns microspace justification off.

.UJ1 Turns microspace justification back on. **(defaulted to on)** This command should be used before you print a columnar table, or before you print a dual-column printed page. If you do not specify .UJ0 before printing a columnar page, the columns may not align up the way you want them to. Remember, after you type the last line of that columnar page, you should turn microspace justification back on by typing .UJ1.

MAILMERGE DOT COMMANDS

.DF Specifies which file contains the data to be merged into the form letter. Only one data file may be used at any one merge-print session. (e.g. ".DF ADDR.DAT").

.RV Specifies the names of the variables and order of the values to be read in from the data file. **Warning:** If there are insufficient data items on a line in the data file, MailMerge will go to the next data line and continue pulling information in as if it were still part of the current data line. (e.g. ".RV N,NAME,ADDR1,ADDR2,INFO)

.RP Repeatedly processes the file that contains this command until all data in the data file has been used. If ".RPn" is used, it will repeatedly process that file n number of times. (e.g. ".RP" or ".RP10").

.SV Allows the user to set certain variables that will remain constant throughout a merge-print sesson. (e.g. the date, names of certain people, or meeting places, etc.) As many .SV commands may be used as necessary. (e.g. ".SV DATE, March 05, 1983" or ".SV PLACE, Sanford City Hall")

.AV Allows the user to have the computer stop and ask for operator input from the keyboard at the beginning, in the middle, or near the end of a merge-print session. The variable may include a prompt to the user specifying what kind of information is to be input. (e.g. ".AV Enter name of person to send this letter to: ", LETNAME").

.DM Displays a message on the screen for the user to follow where the printing session is, informing that disks must be changed, which file is being printed, telling the user to place an envelope in the printer, etc. As many .DM's as desired may be used. If the entire screen becomes full with .DM's, the screen will scroll up to allow for more message displays. The .CS command may also be used to clear the screen after certain messages have been displayed. (e.g. ".DM Now printing Chapter 7").

.CS Clears the screen of all .DM's and .AV's. May be used anywhere in the text as many times as desired. Very useful when moving from one file to another so that the prompts from the previous file don't become confusing. (e.g. ".CS", or ".CS Press RETURN, P to stop, or Enter data for next letter").

.FI Tells the computer to insert a file at the .FI location. When the .FI file(s) have completed printing, any text below the .FI command(s) will continue to be printout. Can be used to chain several paragraphs to form one letter, or to chain several files that have been divided into chapters as one large document. (e.g. ".FI TEST.ABC" or ".FI B:TEST").

.PF Allows the user to print text with different margins than used for editing; to set the desired margins in cases where unusual input produces output other than as desired. Print a file with line spacing other than what the file was originally created in; to change from justified text to ragged right text without having to reform each paragraph, etc. .PF is normally used with several other commands telling it exactly how to format the text, those commands are (.RM, .LM, .LS, .OJ, and .IJ). (e.g. ".PF DIS", ".PF OFF", or ".PF ON").

.RM Allows MailMerge to use the normal right margin for formatting lines, or to change the right margin by specifying ".RMn" where n is the user defined right margin (1 - 240) if line forming is being performed. (e.g. ".RM DIS" or ".RM 72").

.LM Allows MailMerge to use th normal left margin for formatting lines, or to change the left margin by specifying ".LMn" where n is the user defined left margin (1 - 240) if line forming is being performed. (e.g. ".LM DIS" or ".LM 10").

.LS Allows MailMerge to match line spacing with that of the current text when reforming, or to change the line spacing specifying ".LSn" where n is the user defined line spacing (1 - 9) if line forming is being performed. (e.g. ".LS DIS" or ".LS 2").

.OJ Allows user to define if newly formatted lines are to be justified, unjustified, or have the justification match the text currently in use during line reformation. (e.g. ".OJ DIS", ".OJ ON", or ".OJ OFF").

.IJ Allows the user to force justification of ragged-right text during line reform. (e.g. ".IJ ON", ".IJ OFF", or ".IJ DIS").

WORDSTAR QUICK REFERENCE

PROGRAM FUNCTION KEYS

PF1	^OL <ESC>	Set left margin
PF2	^QF	Find
PF3	^QA	Find and replace
PF4	^KB	Mark block beg.
PF5	^KK	Mark block end
PF6	^KV	Move block
PF7	^KC	Copy block
PF8	^OG	Paragraph tab
PF9	^OC	Center text
PF10	^OD	Print control display
PF11	^PS	Underscore beg/end
PF12	^PB	Boldface beg/end
PF13	^OR <ESC>	Set right margin
PF14	^QR	Beginning of file
PF15	^QC	End of file

CURSOR MOVEMENT KEYS

<	^S	Left char
>	^D	Right char
^	^E	Up line
V	^X	Down line
\	^QE ^QS	Top left

NO-FILE MENU

D	Open a document file
E	Rename a file
F	File directory on/off
H	Set help level
L	Change logged disk
M	Run MailMerge
N	Open a non-document file
O	Copy a file
P	Print a file
R	Run a program
S	Run SpellStar
X	Exit to operating system
Y	Delete a file

MAIN MENU

Cursor Movement

^A	Left word
^D	Right char
^E	Up line
^F	Right word
^S	Left char
^X	Down line

Scrolling

^C	Up screenful
^R	Down screenful
^W	Down line
^Z	Up line

Basic Editing Commands

^DEL	Delete char left
^G	Delete character
^T	Delete word
^Y	Delete line

Miscellaneous

^B	Reform paragraph
^I	Tab right
^L	Find/replace again
^N	Insert a RETURN
^U	Stop a command
^V	INSERT ON/OFF
RETURN	End paragraph

Other Menus

^J	Help menu
^K	Block menu
^O	Onscreen menu
^P	Print menu
^Q	Quick menu

HELP MENU

^B Paragraph reform
^D Dot commands, print controls
^F Flags in right-most column
^H Display and set the help level
^M Margins & tabs
^P Place markers
^R Ruler line
^S Status line
^V Moving text

QUICK MENU

Cursor Movement

^QB Block beginning
^QC End of file
^QD Right end line
^QE Top of screen
^QK Block end
^QP Position before previous command
^QR Beginning of file
^QS Left side screen
^QV Start of last find/replace
^QW Continuous up scroll
^QX Bottom of screen
^QZ Continuous down scroll
^Q0-9 To marker 0-9

Delete

^QY Delete to end of line
^QDEL Delete to beg. of line

Miscellaneous

^QA Find & replace
^QF Find
^QL Find misspelling
^QQ Repeat command

ONSCREEN MENU

Margins & Tabs

^OF Ruler from line
^OG Paragraph tab
^OI Set tab
^OL Set left margin
^ON Clear tab
^OR Set right margin
^OX Release margins

Line Functions

^OC Center text
^OS Set line spacing

Toggles

^OD Print control display
^OE Soft hyphen entry on/off
^OH Hyphen help on/off
^OJ Justification on/off
^OP Page break display on/off
^OT Ruler line on/off
^OV Vari-Tabs on/off
^OW Word wrap on/off

BLOCK MENU

Saving Files

^KD Save, done edit
^KQ Abandon edit
^KS Save and resume
^KX Save and exit

Place Markers

^K0-9 set/hide place markers

Block Operations

^KB Mark block beg.
^KC Copy block
^KH Hide/display block
^KK Mark block end.
^KN Column mode on/off
^KV Move block
^KW Write block
^KY Delete block

File Operations

^KE Rename file
^KJ Delete file
^KO Copy file
^KP Print file
^KR Read file

Disk Operations

^KF File directory on/off
^KL Changed logged disk

PRINT MENU

Special Effects
(begin and end)

^PB Boldface beg./end
^PD Double strike beg./end
^PS Underscore beg./end
^PT Superscript beg./end
^PV Subscript beg./end
^PX Strikeout beg./end

Special Effects
(one time each)

^PF Prints ¢
^PG Prints ¬
^PH Overprint next char
^PO Non-break space
^PRETURN Overprint line

Printing Changes

^PA Alternate pitch(12)
^PC Print pause
^PN Standard pitch(10)
^PY Ribbon color changes

User Patches

^PQ(1) Currently not used.
^PW(2) Currently not used.
^PE(3) Currently not used.
^PR(4) Currently not used.

WORDSTAR DOT COMMANDS

.BP Bidirectional print on/off
.UJ Microjustify on/off
.PO Page offset
.CW Character width
.IG or .. Comment (not printed)
.CP Conditional page
.FO Footing
.FM Footing margin
.HE Heading
.HM Heading margin
.LH Line height
.MB Margin at bottom
.MT Margin at top
.PA New page
.OP Omit page number
.PN Page number
.PC Page no. column
.SR Sub/superscript roll
.PL Paper length

MAILMERGE DOT COMMANDS

.DF Data file
.RV Read variable
.RP Repeat
.SV Set variable
.AV Ask for variable value
.DM Display message
.CS Clear screen
.FI File insert
.PF Print-time line formatting
.RM Right margin
.LM Left margin
.LS Line spacing
.OJ Output justification
.IJ Interpret as justified

CALCSTAR REFERENCE

Cursor Movement

^S Moves cursor to the left one cell
^D Moves cursor to the right one cell
^E Moves cursor up one cell
^X Moves cursor down one cell
^Z Moves cursor to 1st column of next row or first row of next column depending on the ";O" Order Command (default next row)
<tab> Moves cursor to the cell of your choice (default cell A1)

Commands

;A Auto: Automatically moves cursor to first cell with the Auto forms mode set and awaits input of data from user before continuing to next forms (SET) cell. Recalculates all after last cell has been input by user.

;C Copy: Copies data from one cell to another cell or range of cells; also copies from a range of cells to one cell or range of cells. Ranges must be compatible. Also copies formulas asking whether or not you want the formulas to change as their relative coordinates change. If one or more coordinaes in a group are not to be changed, they must be immediately followed by an "!". (e.g. A4!+G7) See "!" under the Miscellaneous section.

;D Delete: Allows user to choose deletion of **E**ntry, **R**ow, **C**olumn, or **A**ll. Will cause error message if deleting a row/col. that is referenced by another cell. If this happens, you must change the formula(s) that reference that cell to the cell that will replace the one deleted.

;E Edge: Moves the cell in which the cursor is currently in to the top left portion of the screen unless some rows or columns are locked, then it moves the current cell to the closest unlocked cell.

;F Format: Allows user to choose formatting options as follows:
W)idth: Specify column width of 1 to 63 chars.
P)recision: Specify precision of a column of numbers from 1 to 10 decimal places.
F)orm Mode: Set/Clear cell toggle for use with the Auto form mode.

;H Help: Help Menu gives brief explanation and command summary list of available commands.

;I Insert: Allows user to choose insertion of:
R)ow: Inserts a row into a matrix changing formulas where necessary.
C)olumn: Inserts a column into a matrix changing formulas where necessary.

;L Load: Prompts user which file to load. Then prompts which coordinate to load at and then loads that file at the specified coordinate erasing all previous data. Make sure the file you are working on has been saved before you load another file.

;M Merge: Similar to the "Load" command except instead of erasing all previous data, it overlays the file to merge with the one currently on the screen, replacing only those cells that are overlayed.

;O Order: Changes the order of calculation from Left-to-Right (L-R) to Top-to-Bottom (T-B). Also changes the direction in which the cursor moves when the RETURN key is pressed. Caution: Depending on the order in which you input your formulas, if the order of recalculation is such that it references a cell that will not be recalculated until after the cell referencing it has been recalculated, your answer may be incorrect. To correct this, change the order of recalculation and then recalculate the results, or perform the recalculation twice in the same order.

;P Print: The Print command offers quite a few options, they are:

To which file? PRINTER

This allows you to print your file directly on the printer, or to a text file on disk for use with WordStars' ^KR (read a file) command to read your array into a financial report, etc., by typing the name of the text file over the words "PRINTER".

Top left corner: A1

This allows you to choose what part of the array to print. A1 will start at the beginning, typing any other coordinate over A1 will cause printing to start at that coordinate and continue to the bottom right corner of your array.

Bottom right corner: M20

This is similar to the above except that it lets you choose the bottom right corner of your array at which to stop printing. The default is preset to the last bottom right cell you have entered information in.

Form length: CONTINUOUS
This specifies the length of the paper you are using. If you choose continuous, your printer will not pause for change between pages. If other than continuous paper is to be used, then type the paper length (in number of single lines) over the words "CONTINUOUS" and press RETURN and the prompt "Stop on each page (y,n)?" will appear, otherwise, the prompt "Printer width: 132" will appear.

Stop on each page (y,n)?
This prompt will only appear if you choose a form length of other than continuous, and will pause after printing each page for you to insert another single sheet of paper if you press "y"; otherwise, it will assume you are using continuous forms paper.

Printer Width: 132
This should say "Paper Width" because it centers your array between column 1 and the width you specify (default 132). If your array is larger than the width you specify, it will be segmented to the nearest column that will completely fit within your specified width, with the 2nd,3rd, etc. segments being carried to the next page(s) for easy pasting. If your array is to be segmented, it will inform you of such. If you are using A4 size paper, change the width from 132 to 80 so that it will be centered on that size paper.

Fix ordinates (y,n)?
This will only appear if you specified other than A1 for the "top left corner" prompt. A "y" response will print the heading of each column and then skip to your specified coordinate before continuing its print session. A "n" will only print the portion you asked for without any column titles.

Title>
This prompt lets the user include a centered title at the top of the array and can be as many lines as the page permits. To input a title, just type what you want and press RETURN and, assuming you are printing to the printer, that title will be centered between column 1 and the width you specified above. Then the same prompt will appear again for you to input the next line of your title. To terminate this title prompt just press RETURN without typing any title.

..End of report.

Hit Space to continue.
This tells the user that the print session is now complete, so press the space bar to continue editing that array, to load another array, or to quit, etc.

;Q Quit: Allows the user to exit CalcStar. The prompt "Are you sure (y,n)?" will appear in case you pressed this function by accident. Note: Pressing "y" will cause an unsaved program to become irretrievable. An "n" response will allow the user to continue editing the currently displayed file, or to save that file and then quit.

;R Recalc: This forces recalculation in one of 2 ways.

A)ll: Recalculates everything in your array (see the ";O" command).

E)ntry: Recalculates only the entry at the current cursor position.

;S Save: This saves/stores your array on disk, allowing you several options from which to choose; these are:

File name

Allows the user to specify the name (max. 10 characters/letters preceeded by an optional disk drive name and colon) under which to save the contents of that array.

Password (<CR>=none)

Allows the user to protect an array by including a password (secret code) that must be given prior to loading, deleting, or accessing that file. Pressing RETURN is equivalent to specifying no password. If a password is typed, it will not be displayed, and upon pressing RETURN, the following prompt will appear.

Again

This prompt will only appear if you enter a password, and ask that you reenter the exact code again to insure you typed it correctly the first time. If it is the same, the next prompt will appear, otherwise, an error message will appear and the save command will be aborted.

P)artial or A)ll

Allows the user to choose whether all or only part of the array is to be saved. If only part is to be saved, the prompts "Top left corner" and "Bottom right corner" will appear for you to specify what portion is to be saved.

File exists.
Destroy old contents
(y,n)?

This will only appear if a file with the name you specified already exists. Answering "y" will destroy the previous contents and store the current file under the specified name. An "n" will abort the "save" command and the user may continue as before.

;W What: Tells the user the title of the row and column the cursor is currently in without moving the cursor to the very beginning of the array. (See also the ";=" Lock command).

;G Goto: Prompts the user which cell to move the cursor to. The default is A1 but may be replaced by the users' choice. Pressing RETURN, moves the cursor to the specified (or default) cell.

;* Extend: Turns the help menu at the top of the screen off, allowing 5 extra lines of your array to be displayed on the screen. With the help menu on you can see 10 lines; with it off, you can see 15 lines.

;= Lock: Similar to the ";W" What command except that instead of temporarily showing you the row/col. titles, it permanently locks those titles in view at all times, regardless of where you move the cursor. If you tell the computer to lock more than it can display, you may get the error message CURSOR OFF SCREEN and must unlock everything to continue operation. You have the choice of locking **C**olumns, **R**ows, or **B**oth by placing the cursor in the row(s)/col(s) you want locked and then pressing ";=" and answering with "C, R, or B".

;? Space: Shows the amount of storage space still available for entry into your array. The result appears as:

Room for _____ entries.

Miscellaneous

@ Cursor Position: Useful when inputting the cursor cell into a formula. Pressing "@" will automatically input the coordinates the cursor is currently at into the formula. Can also be used in the copy command to input the cursors' coordinates.

? Evaluate: Similar to a calculator. Used to find the answer to an equation/problem without actually inputting the formula or answer into your array.

^ Data Toggle: Toggles the data "type" key from "numeric" to "text". Numeric being numbers, equations, formulas, etc., and "text" being letters, words, names, etc.

! Special Entry and Hold constant: This symbol is used for two different functions:

1) Can be used as a special entry formula. Suppose you wanted to be able to input a list of numbers from a table, but needed those figures to include a 7% increase. You would use the formula "!107%" in a vacant cell, and copy that formula for the length of the values to be input. Then position the cursor in the first cell and input a number. Upon pressing RETURN, the number you input will be increased by 7% and entered at the cursor location.
2) Can also be used in coordinate formulas to keep one or more of several coordinates constant when doing relative copying. (e.g. (A4!+C23/SQRT(B10!)) will keep A4 and SQRT(B10) constant and relatively change the coordinate C23 as it is copied.

<ESC> Cancel: Cancels a command. Depending on which command you cancel, you may or may not have to press RETURN after pressing the <ESC> key to return you to the edit line.

Calculator Functions (Used with ? and in formulas)

+ Addition: Used to add numbers, formulas, and/or coordinates.

- Subtraction: Used to subtract numbers, formulas, and/or coordinates.

* Multiplication: Used to multiply numbers, formulas, and/or coordinates.

/ Division: Used to divide numbers, formulas, and/or coordinates.

E+ Pos. Exponent: Used to express positive exponential notation. If a value is too wide to fit within the width of that column, it will automatically be converted to positive exponential notation.
(e.g. $1.28E+7 = 1.28 \times 10^{7}$ or 12,800,000)

E- Neg. Exponent: Used to express negative exponential notation. If the decimal precision is larger than the column width, it will automatically be converted to negative exponential notation.
(e.g. $1,28E-7 = 1.28 \times 10^{-7}$ or 0.000,000,128)

System Functions

SUM: Finds the sum of a range of values. Examples:
+SUM(A4>A50) +SUM(A4,B17,C12>C40,D1>H1) +SUM(A4>A20)*110%

CNT: Finds the total number of items in a range of values. Examples:
+CNT(A4>A50) +CNT(A4,B17,C12>C40,D1>H1) +CNT(A4>A20)*110%

AVG: Finds the average of a range of values. Examples:
+AVG(A4>A50) +AVG(A4,B17,C12>C40,D1>H1) +AVG(A4>A20)*110%

MAX: Finds the maximum value in a range of values. Examples:
+MAX(A4>A50) +MAX(A4,B17,C12>C40,D1>H1) +MAX(A4>A20)*110%

MIN: Finds the minimum value in a range of values. Examples:
+MIN(A4>A50) +MIN(A4,B17,C12>C40,D1>H1) +MIN(A4>A20)*110%

SQRT: Finds the square root of a number. Examples:
+SQRT(4) +SQRT(A5) +SQRT(A5*4/AVG(C3!))

LOG: Finds the logarithm of a number. Examples:
+LOG(4) +LOG(A5) +LOG(A5*4/AVG(C3!))

LN: Finds the natural logarithm of a number. Examples:
+LN(4) +LN(A5) +LN(A5*4/AVG(C3!))

ABS: Finds the absolute value of a number. Examples:
+ABS(4) +ABS(A5) +ABS(A5*4/AVG(C3!))

EXP: Finds the exponential value of the entry by taking the value of e, 2.7182818, to the power you enter. Examples:
+EXP(2) +EXP(5) +EXP(10)

REGR: Linear regression computes a linear equation from the values in the range of cells specified by the user. Once the regression function has been used, three other functions are available for the user in conjunction with the regression function. Examples:
+REGR(B2>G2,B5) +REGR(A5>A17,48) +REGR(F1>F40,B2)

PROJ: Allows the user to enter a value for an independent variable and then the best estimate for the dependent variable will be calculated and entered at the current cursor location. Examples:
+PROJ(10) +PROJ(1125.48) +PRQJ(2000)

DEPD: Allows the user to enter a value for the dependent variable and then the best estimate for the independent variable is calculated and entered at the current cursor location. Examples:
+DEPD(2000) +DEPD(5000) +DEPD(700)

SLOPE: Allows the user to have the system enter the slope of the linear equation computed from the regression function, into the current location. The slope gives you a rough estimate of the correlation between the independent variable and the dependent variable. Note: This type of regression does not pretend to determine cause and effect, but only tells you what kind of correlation there is. Examples of use are:
+SLOPE()

Formatting Commands

/C	Center text:	Centers text within a column. Can be specified when entering text by preceeding the text to be entered with /C. (e.g. /CItem). Can also be specified after text has been input by moving the cursor to that cell, typing /C into the edit line and pressing RETURN. If the width of that column is changed, corrections will be made to keep the text in the center of that column.
/R	Right justify text:	Same as the center command except that it right justifies text.
/L	Left justify text:	Same as the center command except that it left justifies text.
/=	Repeat next char.:	Repeats the character(s) that follow the /= command all the way across the column the cursor is currently in. If the width of that column is changed, appropriate changes are automatically made to continuously repeat all the way across that column.
/P	Print form feed:	Allows the user the option to decide where to break the form to the next page. Inserting a /P in column A causes the printer to insert a form feed and continue printing at the top of the next page.
\	Comment follows:	Allows the user to insert comments into a numerical/text entry for his own notes, etc. Will not be printed and has no effect on the final results of an equation. This provides an easy way to remember why a certain formula was used.

Conditional Operators

< Less than

> Greater than

= Equal to

<> Not equal to

<= Less than or equal to

>= Greater than or equal to

* Logical AND: The intersection of two values. Both values must be true for the entire expression to be true.

+ Logical OR: The union of two values. One of the two values needs to be true for the entire expression to be true). This operator has lower precedence than the "+" AND operator.

: Delimiter for conditions in an executable statement

Executable statements:

If the condition is true:

After the first colon (':') the user may enter the statement to be executed if the condition is true. This statement will be executed only if the condition is true. The statement may be a number, a coordinate, a formula involving any combination of both, or a string of characters enclosed in double quotes (e.g. "yes"). If you enter a condition followed by two colons, the value assigned will be zero if the condition is true.

If the condion is false:

After the second colon (':') the user may enter a statement to be executed if the condition is evaluated to be false. This statement is optional and if you don't enter a statement, 0 will be entered if the condition is false. The statement may be a number, a coordinate, a formula involving any combination of both or a string of characters enclosed in double quotes.

Examples:

```
(A4>30)*(B4>20%I4):100:50

(A4>15)+(B4>2000)+(C5<0)*(C5>200):"NOGOOD":"OK"
```

CALCSTAR QUICK REFERENCE

Cursor Movement

^S Left
^D Right
^E Up
^X Down
^Z Col A next row
or Row 1 next col
<tab> Goto

Commands

;A Auto
;C Copy
;D Delete
;E Edge
;F Format
;H Help
;I Insert
;L Load
;M Merge
;O Order
;P Print
;Q Quit
;R Recalc
;S Save
;W What
;G Goto
;* Extend
;= Lock
;? Space

Miscellaneous

@ Cursor Position
? Evaluate
^ Data Toggle
! Special Entry and
Hold constant
<ESC> Cancel

System Functions

SUM Sum values
CNT Count values
AVG Average values
MAX Maximum value
MIN Minimum value
SQRT Square root
LOG Logarithm
LN Natural logarithm
ABS Absolute value
EXP Exponent
REGR Regression
PROJ Projection
DEPD Dependent
variable
for REGR
SLOPE Slope of REGR

Formatting Commands

/C Center text
/R Right justify text
/L Left justify text
/= Repeat next char.
/P Print form feed
\ Comment follows

Conditional Operators

< Less than
> Greater than
= Equal to
<> Not equal to
<= Less than or equal to
>= Greater than or equal to
* Logical AND
+ Logical OR
: Delimiter

Calculator Functions (Used with ? and in formulas)

+ Addition
- Subtraction
* Multiplication
/ Division
E Exponentation

DATASTAR REFERENCE

FORMGEN COMMANDS

Help Screen 4

Help screen 4 only gives an explanation about FORMGEN and what it is used for. If your software has been installed for only 3 help menus, refer to the DataStar Reference Manual (available separately) to see the contents of help level 4.

Help Screen 3

Cursor

^A Moves cursor to the previous item. If cursor is in a field, ^A will move cursor to previous field. If cursor is outside of a field, ^A will move cursor to the previous item that is outside of a field. If cursor is at the first field or item, and ^A is pressed, cursor will move to the last field or item on your form.

^F Moves cursor to the next item. If cursor is in a field, ^F will move cursor to the next field. If cursor is outside of a field, ^F will move cursor to the next item that is outside of a field. If cursor is at the last field or item, and ^F is pressed, cursor will move to the first item or field on your form.

^D Moves cursor to the right one character at a time.

^S Moves cursor to the left one character at a time.

^E Moves cursor up one line at a time. If the cursor is in line one and ^E is pressed, the cursor will move to the bottom line of your form.

^X Moves cursor down one line at a time. If the cursor is in the bottom line of your form and ^X is pressed, the cursor will move to line one of your form.

^U Sets or clears tabs. Tabs are indicated by "." across your screen every 8 columns. If a tab is set, with the cursor in the same column as the tab, pressing ^U will clear that tab. If there is no tab in the cursor column, pressing ^U will set a tab at that column.

^I Moves the cursor to the first tab. If no tabs are set, ^I will move the cursor to column zero of the next line. Pressing the TAB key will work the same as ^I.

Deletion

DEL Pressing the DEL key will delete the character to the immediate left of the cursor, but will not close up the characters to the right of the cursor.

^G Deletes the character directly over the cursor, closing up the space and moving all characters right of the cursor position to the left one space.

^T Deletes the entire column that the cursor is positioned in. Caution should be taken when using this command as lines above and/or below the cursor will also have the column the cursor is in deleted. It is suggested that this command only be used when the cursor is positioned in the far-most right column of the screen to shorten the width of a form.

^Y Deletes the entire line the cursor is currently positioned in, and brings all lines below the cursor line, up one line. Used to delete entire lines of text, and to shorten the total length of your form.

Insertion

^P Copies all information in the current cursor line into the buffer line (the bottom line of your form). This command is used as part of a copy procedure. First you position your cursor in the line you want to copy and press ^P (this copies the cursor line data to the buffer line). Then move your cursor to the position you want the data copied to and press ^N to copy the buffer line to the current cursor position.

^V Inserts a hole (space) in your form moving all text to the right of the cursor one position to the right. Caution should be taken when inserting several holes. (e.g. if the right margin of your form has been decreased to 65 columns, and you have the word "DATE" at column 60. If you press ^V three times with the cursor to the left of the word "DATE", as the letters are pushed past the right edge of your form, they are lost (or deleted)).

^B Inserts one entire column at the current cursor location. Caution should be taken when using this command as it opens up one complete column from line one of your form to the last line of your form. It is suggested that you only use ^B with your cursor in the far-most right column of your form to extend the right boundary of that form one extra column each time you press ^B.

^N Copies the buffer line (see ^P above) to the cursor line. If there is data in the line the cursor is in, all data from that line to the bottom of your form will be moved down one line. Note: If you want to copy (insert) a blank line, and your buffer line has text other than a blank line in it, you must move your cursor to a blank line and press ^P to load the buffer line with the blank line the cursor is in, and then go back and use ^N to copy the new buffer line (blank line) to the cursor line.

Other

^J Toggles the help menu from help menu 4 to help menu 1 decreasing the help it gives you respectively. If you are at help level 1 and press ^J, you will return to help level 4. Note: If your software was installed to give you only 3 help menus, you cannot get help level 4 to appear on your screen.

^W Prints the current form to the printer including the field lengths, any attributes (if assigned), and other information.
^C Allows you to exit FormGen in one of several ways.
C - Allows you to save your form and continue editing it.
D - Allows you to save your form and then chain DataStar to start inputting data to that form.
B - Allows you to save you form and return to the operating system of your computer.
L - Lists errors (if any) on the printer.
A - Aborts your current form only after double checking that you really want to abort it asking "Abort (y/n)?".
^K Specifies the field the cursor is in as a key field. If the cursor is not in a field, an error message will be displayed.

Help Screen 2

Cursor

All of the "Cursor" commands are the same as in Help Screen 3.

Field

^Q Pressing the SHIFT plus the "_" underline key is exactly the same. Specifies where you want your fields to be placed.
^Z With cursor positioned within a field, deletes that entire field. If cursor is not positioned with a field, an error message will be displayed.
^R Allows user to specify certain attributes to fields. (e.g. Numeric entry only, only certains ranges of entries, derive fields from other data bases, etc.) If cursor is not within a field when ^R is pressed, an error message will be displayed.

Highlight

^O Used with terminals that support onscreen highlighting. Turns highlighting on if it was off, and off if it was on.
^L Used with terminals that support onscreen highlighting. Turns one complete block of highlighted text off.

Other

All of the "Other" commands are the same as in Help Screen 3.

Help Screen 1

Only gives cursor location by line and column. No other help is given.

LINE=000 COL=000

DATASTAR COMMANDS

FROM HELP MENU

Cursor Movement

^A Moves cursor to the previous field within the form. If cursor is at the first field of a form, will not move any further.

^F Moves cursor to the next field within the form. If cursor is at the last field of a form, will not move any further.

^S Moves cursor left one character within a field. If cursor is at the first position within a field, ^S will not move the cursor any further.

^D Moves cursor right one character within a field. If cursor is at the last position within a field, ^D will not move the cursor any further.

Edit Functions

^G Deletes the character directly over the cursor, closing up any characters to the right of the cursor within the field the cursor is in.

DEL Deletes the character immediately to the right of the cursor, closing up any characters to the right of the cursor within the field the cursor is in.

^V Inserts a hole at the cursor position moving all characters above and to the right of the cursor one space to the right. Note: Characters that are pushed past the right-most position of the current field are lost.

^C Used in the ADD MODE. When inputting several records with common data, one after the other, using ^C will copy the data from the previous record into the current cursor location.

Miscellaneous

^Z Used to clear the screen of unnecessary leftover characters. Note: Some terminals do not need this function.

^U Will print the form to the printer. If data is on the screen, will also print the data appearing on the screen along with the form.

^O Similar to the ^U command except that it prints all data without any background form.

^J Turns help menu on and off.

^R Only used when working within a batch file. This command returns you to your main data file from your batch file without verifying the batch file. Used to temporarily exit from the batch file only to return to it at a later time for

more input or verification.

Other

^B Used to enter a new record, or to enter changes/updates to an existing record. Upon pressing ^B, a message asking you to press RETURN to enter data; RUB (the DEL key) to delete data; or any other key to return to that same record to make more corrections will appear at the top of your screen.

^E Exits user from the current mode, and returns you to the mode selection menu.

FROM MODE SELECTION MENU

^A Allows user to add new records to a data file.

^D Allows user to scan data (^N next record, ^P previous record) in data file order (the order it was input).

^I Allows user to scan data (^N next record, ^P previous record) in indexed (alphanumerically sorted) order.

^K Allows user to select a record by its key field(s). Upon pressing ^K, the cursor automatically moves to the designated key field(s) where the specific information may be placed. Upon entering the key data and pressing return, the computer will locate that record and display it on the screen. If that record cannot be found, a message will be displayed telling the user so.

^B Allows the user to select a batch (group) file to use for data input to a temporary data file, and then later added to the main data file. Useful when working with large data files.

^V Verifies the batch file the user specifies. This verification process merges the batch file into the main file. Used when a batch file is completed and ready to be added to the main file.

^F Performs file maintenance. Automatically sorts records alphanumerically and removes deleted records from your disk making access faster by packing your data file.

^E Allows user to exit the current form being used. Upon pressing ^E, another prompt asking for the name of another form definition file will appear. If another form is specified, that form will be displayed for entry, etc. If no other form is desired, press ^C to exit from the prompt.

^M Allows user to search for specific information other than that contained in the key field. Upon pressing ^M, all fields on the screen will be filled with ***'s (asterisks are wildcards and can be any letter, number, symbol, etc). By changing the ***'s, the user can tell what specific information is requested. Upon pressing ^B, the computer will automatically search every record in the datafile for an exact match. If more than one record has the matching data, press ^N to view the next record with matching data, or ^P to view the previous record with matching data. Note: When the edit scan mode is no longer needed, change all characters back to ***'S.

SPACE When the space bar is pressed, the mode currently displayed in the upper-most left-hand part of your screen will be selected. Usually this is the mode just exited from.

DATASTAR QUICK REFERENCE

FORMGEN COMMANDS

Help Screen 4

Help screen 4 only gives an explanation about FORMGEN and what it is used for. If your software has been installed for only 3 help menus, refer to the DataStar Reference Manual (available separately) to see the contents of help level 4.

Help Screen 3

Cursor

^A Left item
^S Left char
^D Right char
^F Right Item
^E Up line
^X Down line
^U Set/clear tab
^I Tab

Other

^J Rotate help
^W Print form
^C Exit
^K Key field toggle

Deletion

DEL Character left
^G Character right
^T Entire column
^V Entire line

Insertion

^P Line buffer
^V Character right
^B Entire column
^N Entire line

Help Screen 2

Cursor

All of the "Cursor" commands are the same as in Help Screen 3.

Other

All of the "Other" commands are the same as in Help Screen 3.

Field

^Q Add/extend field
^Z Delete field
^R Define attributes

Highlight

^O Set/clear
^L Delete block

Help Screen 1

Only gives cursor location by line and column. No other help is given.

LIN=000 COL=000

DATASTAR COMMANDS

FROM HELP MENU

Cursor Movement

^A Previous field
^F Next field
^S Left char
^D Right char

Edit Functions

^G Delete char
DEL Delete char left
^V Insert hole
^C Copy prev data

Miscellaneous

^Z Restore screen
^U Print form
^O Print data
^J Help
^R Restore main (*1)

Other

^B End entry
^E Exit current mode

*1 Pressing ^R from the above menu will only work when you are in a batch file. Otherwise an error message will occur.

FROM MODE SELECTION MENU

^A Add new record
^D Scan in Data file order
^I Scan in Index order
^K Select record by Key
^B Select Batch file
^V Verify Batch file
^F File maintenance
^E Exit current mode
^M Edit scan Mask
SPACE current mode

USING INSTALL.COM

The MicroPro software supplied with your Sanyo MBC System has already been installed to take full advantage of the hardware features of your microcomputer. WordStar, however, needs to be "told" about the printer you are to use in order to be able to access its features.

Your WordStar has been installed for a "teletype like" (or dot matrix) printer. If you wish to install your WordStar for other than this type of printer (i.e. for a daisy wheel printer), then follow the procedures below.

1. With both "WS.COM", and "INSTALL.COM" on a disk in drive A:, and the system prompt "A>" displayed on your screen, type "INSTALL" and press the RETURN key. After completing this step, the following will appear on your screen:

GP INSTALL Release 2.00 for SANYO
Copyright (c) 1983 MicroPro International Corporation

All rights reserved

This software has been provided pursuant to a License Agreement containing restrictions on its use. The software contains valuable trade secrets and proprietary information of MicroPro International Corporation and is protected by federal copyright law. It may not be copied or distributed in any form or medium, disclosed to third parties, or used in any manner not provided for in said License Agreement except with prior written authorization from MicroPro.

Type any key to continue... _

Press the space bar (or for that matter, any key) to continue with the next screen.

With INSTALL you can set up your terminal and printer for use with MicroPro programs. You can also change certain features of the program with INSTALL.

Would you like to continue?
Enter Y or <RETURN> for Yes.
Enter N for No. _

Press "Y" if you wish to continue installing your software and the menu below will appear asking to select the software to install, otherwise, pressing "N" will exit you from the INSTALL program.

Which MicroPro product would you like to Install?
Enter - WS for WordStar
- WM for WordMaster
- DS for DataStar
- RS for ReportStar
then press <RETURN>.

Product? _

With this menu displayed, you must tell the installation program which software you wish to install. In the example below we will use WordStar, so type WS and press return, other choices will display similar menus and prompts pertaining to that particular package.

You will install WordStar for your equipment and needs. The following points will help you use the INSTALL program:

- **You can use the installation manual to answer any questions you may have.**
- **You can also use the WordStar Reference Manual Glossary to better understand unfamiliar terms.**
- **You will have the opportunity to review and accept or reject each item after you select it and again at the end of the program.**
- **If you press unnecessary keys, they will be ignored.**
- **If you need to leave the INSTALL program at any point, press ^C.**

Type any key to continue... _

Again, press the space bar or any other key to continue.

Enter the disk drive name (a letter followed by a colon, B:) where WordStar files will be located while you run INSTALL: then press <RETURN>. _

If you have INSTALL.COM and WS.COM on disk drive A:, just type the letter "A" followed by a colon ":", and press RETURN; otherwise, type the letter of the disk drive (i.e. B, C, D) INSTALL.COM is on, followed by a colon and then press RETURN. If the drive you specify does not contain INSTALL.COM, an error message will appear.

The installed WordStar program is normally contained in WS.COM. If you are reinstalling WordStar or have previously renamed the file, enter the new name below; otherwise press <RETURN>.

Name of file to install, or <RETURN> for A:WS.COM _

Here, it is assumed that the name of your WordStar file is WS.COM, and that it is located on disk drive A:, so just press return, otherwise, give the necessary information (i.e. B:WS1.COM, C:WSOLD.COM) and then press RETURN.

When you are finished running this program, you will have an installed version of WordStar in a new file on the logged disk drive. It will be called A:WS.COM. If you wish to name the file something else, enter the name below. Otherwise press <RETURN>. To change the name, enter up to eight letters or numbers. The extension .COM will automatically be added to any name.

Enter name of file for installed WordStar, or <RETURN> for A:WS.COM _

Now you must tell the installation program what filename to store your newly installed version of WordStar under. If you wish to keep the original installation, and your own installation, then type a name other than WS.COM or the name you have given your original installation of WordStar, and press RETURN. (Note: It is not nessary to type the extension (.COM) after the filename as this program automatically adds it.

File for installed WordStar is : A:WS.COM

***** CAUTION *** This file already exists. If you make changes during this INSTALL session and save these changes, you will overwrite this file.**

If this is correct, enter Y or <RETURN>. If not, enter N. _

The "*** CAUTION ***" message above will only appear if you are saving your newly installed version of WordStar ontop of (overwriting) your previously installed version, otherwise the same prompt will appear without the "*** CAUTION ***" message.

You are installing the file A:WS.COM and producing the file A:WS.COM.

If this is correct, enter Y or <RETURN>. If not, enter N. _

The prompt above is only a double checking prompt, showing you what you have specified, and asking if this is what you really want. If you specify "Y", the prompt below will appear, and then after a few seconds, the "INSTALLATION MENU" will appear.

INSTALL is copying the file A:WS.COM

PLEASE WAIT

The message above will be displayed on your screen for several seconds as your computer loads WS.COM into memory. All the changes you make to this installation will be stored in this temporarily copied file until you either abort installation, or save the copy to a command file.

******* INSTALLATION MENU *******

If you are installing a new copy of WordStar, you must select letter A to install your terminal, then letter C to install your printer. If your terminal is not listed on the Menu of Terminals, return to this menu and select letter B. If your printer is not listed on the Menu of Printers, return to this menu and select letter D. If you want to change a particular WordStar feature, choose letter E.

A Menu of Terminals
B Custom Installation of Terminals

C Menu of Printers
D Custom Installation of Printers

E Menu of WordStar Features
F Operating System Considerations

X Exit from INSTALL

Enter the letter of your choice (A/B/C/D/E/F/X). _

The above is a selection menu from which you may install WordStar for a different printer or change some of WordStars defaults. Selection A normally allows you to choose from several standard terminals (computers) and selection B to customize WordStar for your specific terminal. However, since your software has already been installed for you MBC computer, you will not need either of these Selections. Selections C and D are similar to A and B except that they install WordStar for your specific printer. Selection E allows you to change some of WordStar's defaults (i.e. help level, left margin, right margin, page offset, etc.). Selection F allows you to install WordStar to run under an MP/M environment, and selection X exits you from INSTALL.COM.

To, for example, install WordStar for the "SANYO PR-5500" Daisy Printer, press selection C (Menu of Printers) and the printer types below will be displayed on your screen.

Printer is currently : Standard Printer

******* STANDARD PRINTER TYPES *******

Select the letter of your printer from the list below.
This is menu #1 of 2; to view the other menu press 2.

A "SANYO PR-5500" Daisy Print
B C. Itoh/TEC Starwriter/F10
C Centronics 353
D Centronics 739
E Diablo 630
F Diablo/Xerox 1610/1620
G Diablo/Xerox 1640/1650
H Epson MX80/100-no Graftrax
I Half line feed printer
J IBM Parallel printer
K MPI 88G/99G
L NEC 8023A matrix printer

Enter the letter of your choice,
or enter the appropriate menu number,
or press <RETURN> to leave unchanged. _

As mentioned above, we will be installing WordStar to work with the SANYO PR-5500 Daisy Printer, so type A, or if you have a different printer, type the selection of your printer. Note: If your printer is not displayed on this menu, type 2 and a second printer menu will appear; typing 1 will return you to the currently displayed menu. If your printer is not listed on either menu, then you must custom install WordStar for your printer, referring to your printer manual for the relevent specifications.
One or more of the following prompts may differ depending on your printer selection.

You have chosen : "SANYO PR-5500" Daisy Printer

Make sure automatic line feed or local line feed switches on the printer are OFF.

If this is correct, enter Y or <RETURN>. If not, enter N. _

Because we want the SANYO PR-5500 printer selection, just press RETURN, otherwise, pressing "N" will allow you to make a different printer selection.

Communications protocol is currently : No protocol

******* COMMUNICATIONS PROTOCOL MENU *******

Some printers require special codes to regulate the flow of information from the computer to the printer. If you do not know whether you need one, see the installation manual.

A NONE required (or handled outside of WordStar)
B ETX/ACK protocol
C X-ON/X-OFF protocol

Enter the letter of your choice (A/B/C), or press <RETURN> to leave unchanged. _

Press RETURN for this prompt also unless your printer handles special signals from the computer.

Communications protocol is now : No protocol

If this is correct, enter Y or <RETURN>. If not, enter N. _

Press RETURN as the SANYO PR-5500 uses no communications protocol.

Driver is currently : Primary list device

******* DRIVER MENU *******

In order for WordStar to work with the printer you must select a printer driver, the part of a program that sends information to the printer. if you do not know what kind of printer driver you need, see the installation manual.

(With no protocol, the usual driver selection is A.)

A Operating system primary list device
B Operating system secondary list device (CP/M only)
C Direct I/O to 8-bit port

Enter the letter of your choice (A/B/C),
or press <RETURN> to leave unchanged. _

The usual driver is the list device, so press RETURN.

Driver is now : Primary list device

If this is correct, enter Y or <RETURN>. If not, enter N. _

This is what we want, so press RETURN. Pressing N returns you to the driver selection menu allowing you to choose another device.

******* INSTALLATION MENU *******

If you are installing a new copy of WordStar, you must select letter A to install your terminal, then letter C to install your printer. If your terminal is not listed on the Menu of Terminals, return to this menu and select letter B. If your printer is not listed on the Menu of Printers, return to this menu and select letter D. If you want to change a particular WordStar feature, choose letter E.

A Menu of Terminals
B Custom Installation of Terminals

C Menu of Printers
D Custom Installation of Printers

E Menu of WordStar Features
F Operating System Considerations

X Exit from INSTALL

Enter the letter of your choice (A/B/C/D/E/F/X). _

Once you have completed the driver device assignment section, you will again be returned to the INSTALLATION MENU to further install/modify WordStar, or to exit INSTALL and either save or abandon your modifications.

The changes made during this session of INSTALL are stored in a temporary file. You may now save these changes in your installed file A:WS.COM.

These are your current values:

Terminal	**:**	**SANYO MBC-1200/1250 3/23/83**
Printer	**:**	**"SANYO PR-5500" Daisy Printer**
Communications protocol	**:**	**No protocol**
Driver	**:**	**Primary list device**

******* EXIT OPTIONS MENU *******

A Save the changes made during this INSTALL session
B Quit this session of INSTALL without saving changes
C Change any of your choices / Remain in INSTALL

Enter the letter of your choice (A/B/C). _

The above menu shows you what selections you have made for your terminal, printer, communications protocol, and driver. If these selections are correct, type A and your changes will be saved to the file you specified earlier in this session. If you wish to abandon all changes made so far, press B, otherwise, press C to continue modification of your choice.

Your new installed WordStar file is A:WS.COM.

You are returning to the operating system.

A>

Upon exiting from the INSTALL program (typing A from the exit options menu), the two lines above will be displayed telling you that your newly installed WordStar is being saved to the file you specified, along with another message telling you that you are returning to the operating system. Once you have returned to the operating system (indicated by the A> being displayed on your screen) you may immediately use your newly installed WordStar file.

MBC-1100 Users

Disk #1 contains:

CD.COM
MAILMRGE.OVR
SPELSTAR.DCT
SPELSTAR.OVR
WS.COM
WSMSGS.OVR
WSOVLY1.OVR
CS.COM
CS.OV1
CS.OV2
CS.OVR
CSDUMP.COM
CSDUMP.OVR
CSMASK.MSK
TERMCAP.SYS

Disk #2 contains:

BATCH.OVR
DATASTAR.COM
FORMGEN.COM
FORMSORT.COM
FORMSORT.OVR
PUTEOF.COM
REDIT.COM
REMSGS.OVR
REPORT.COM
RGEN.COM
RSMSGS.OVR

Disk #3 contains:

CLIENTSR.DEF
CLIENTSR.DTA
CLIENTSR.DX
CUSTOMER.DTA
CUSTOMER.NDX
DEMO.CSD
HELP1.CSD
HELPER.CSD
INVCE.DEF
INVCE.DTA
INVCE.NDX
OKSTATES.DTA
OKSTATES.NDX
ORDER.DEF
PAYMENTS.DEF
PAYMENTS.DTA
PAYMENTS.NDX
PRINT.TST
PRODUCTR.DEF
PRODUCTR.DTA
PRODUCTR.NDX
PRODUCTS.DTA
PRODUCTS.NDX
SAMPLE.TXT
STAFF.DEF
STAFF.DTA
STAFF.NDX
INSTALL.COM
WS.INS
RS.INS
RINSTALL.COM

MBC-1200/4000 Users

Disk #1 contains:

CD.COM
MAILMRGE.OVR
SPELSTAR.DCT(MBC-1200)
SPELSTAR.OVR
WS.COM
WSMSGS.OVR
WSOVLY1.OVR
CS.COM
CS.OV1
CS.OV2
CS.OVR
CSDUMP.COM
CSDUMP.OVR
CSMASK.MSK
TERMCAP.SYS
BATCH.OVR
DATASTAR.COM
FORMGEN.COM
FORMSORT.COM
FORMSORT.OVR
PUTEOF.COM
REDIT.COM
REMSGS.OVR
REPORT.COM
RGEN.COM
RSMSGS.OVR

Disk #2 contains:

CLIENTSR.DEF
CLIENTSR.DTA
CLIENTSR.DX
CUSTOMER.DTA
CUSTOMER.NDX
DEMO.CSD
HELP1.CSD
HELPER.CSD
INVCE.DEF
INVCE.DTA
INVCE.NDX
OKSTATES.DTA
OKSTATES.NDX
ORDER.DEF
PAYMENTS.DEF
PAYMENTS.DTA
PAYMENTS.NDX
PRINT.TST
PRODUCTR.DEF
PRODUCTR.DTA
PRODUCTR.NDX
PRODUCTS.DTA
PRODUCTS.NDX
SAMPLE.TXT
STAFF.DEF
STAFF.DTA
STAFF.NDX
INSTALL.COM
WS.INS
RS.INS
RINSTALL.COM
SPELSTAR.DCT(MBC-4000)

MBC 1100 Users

DISK #1 contains:

WordStar and its overlays; MailMerge overlay; SpellStar overlay (the dictionary is on disk #3 and must be copied to a disk with a minimum configuration of WordStar and its overlay files and the SpellStar overlay file); CalcStar and its overlays and utility programs.

DISK #2 contains:

InfoStar and its overlays and utility programs.

DISK #3 contains:

The SpellStar dictionary (necessary to use the SpellStar overlay with WordStar); all demonstration files for the above software.

MBC 1200/4000 Users

DISK #1 contains:

WordStar and its overlays; MailMerge overlay; SpellStar overlay and dictionary; CalcStar and its overlays and utility programs; InfoStar and its overlays and utility programs.

DISK #2 contains:

All demonstration files for the above software along with INSTALL.COM to be able to install your software to operate with your system disk.

WordStar includes:

WS.COM *
WSMSGS.OVR *
WSOVLY1.OVR *
INSTALL.COM

Optional overlays:

MAILMRGE.OVR
SPELSTAR.OVR w/SPELSTAR.DCT

(* Files necessary to run WordStar)

CalcStar includes:

CS.COM *
CS.OV1 *
CS.OV2 *
CS.OVR *
CSDUMP.COM
CSDUMP.OVR
CSMASK.MSK *
TERMCAP.SYS *
INSTCS.COM
INSTCS.OVR
INSTCS.DAT

(* Files necessary to run CalcStar)

InfoStar includes:

FORMSORT.COM
FORMSORT.OVR
PUTEOF.COM
REDIT.COM
REMSGS.OVR
REPORT.COM
RGEN.COM
RSMSGS.OVR
DATASTAR.COM
FORMGEN.COM
BATCH.OVR
RINSTALL.COM

Demonstration files include

CLIENTSR.DEF
CLIENTSR.DTA
CLIENTSR.DX
CUSTOMER.DTA
CUSTOMER.NDX
DEMO.CSD
HELP1.CSD
HELPER.CSD
INVCE.DEF
INVCE.DTA
INVCE.NDX
OKSTATES.DTA
OKSTATES.NDX
ORDER.DEF
PAYMENTS.DEF
PAYMENTS.DTA
PAYMENTS.NDX
PRINT.TST
PRODUCTR.DEF
PRODUCTR.DTA
PRODUCTR.NDX
PRODUCTS.DTA
PRODUCTS.NDX
SAMPLE.TXT
STAFF.DEF
STAFF.DTA
STAFF.NDX
INSTALL.COM
WS.INS
RS.INS
RINSTALL.COM

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